

CHAPTER 14 OTHER PROVISIONS

SIFC-1401.0 THE STRUCTURAL ENGINEER OF RECORD REVIEW AND APPROVAL STAMP

All *construction/fabrication and erection documents* required to be reviewed and approved by the **Structural Engineer of Record (SER)** shall bear a review and approval stamp of the **SER**. Examples of acceptable formats for such stamps are given in this section.

The stamp shall contain language as shown in the examples. The stamp has three sections:

- Results of the review in specific terms, with corresponding instructions. This section is mandatory. The words or phrases "Approved", "Approved as Noted" or "Approved as Corrected", and "Disapproved" shall appear. Words or phrases such as "Reviewed", "No exception taken", etc., are not acceptable. The word "fabrication" can be interchanged with the word "construction."
- Clarification statements to explain the scope or qualify the results of review. This section is optional. The text most commonly used by engineering firms includes provisions that the approval is for general conformance with the design intent and the contract requirements, or that the reviewer does not assume responsibility for fabrication or construction processes, or that the contractor is responsible for coordination of trades and satisfactory execution of the work.
- Signature and date lines. The signatory area shall be completed. This section is mandatory.

Note: The requirement for review and approval by the **SER**, and the format of the **SER** review/approval stamp, is in addition to the seal and signature requirement for documents required to be prepared by **Registered Design Professionals**.

APPROVAL FOR GENERAL COMPLIANCE WITH STRUCTURAL CONTRACT DOCUMENTS	
<input type="checkbox"/> APPROVED	Fabrication may proceed as shown.
<input type="checkbox"/> APPROVED AS CORRECTED	Fabrication may proceed based on corrections indicated.
<input type="checkbox"/> APPROVED AS CORRECTED RESUBMIT FILE COPY	Fabrication may proceed based on corrections indicated. Correct submission and resubmit for record purposes only.
<input type="checkbox"/> DISAPPROVED	Fabrication may not proceed. Correct submission for further review.
<input type="checkbox"/> REVIEWED FOR INFORMATION	Approval not required. Accepted for information purposes only.
<p>Approval is for general compliance with the structural contract documents only. This approval assumes no responsibility for dimension, quantities and conditions that pertain to fabrication and installation or for processes and techniques of construction. The Contractor is responsible for coordination of the work of all trades and the performance of this work in a safe and satisfactory manner.</p>	
<p>BY _____</p> <p>DATE _____</p> <p>_____</p> <p>(NAME OF COMPANY)</p>	

APPROVAL FOR DESIGN CONFORMITY	
<input type="checkbox"/> APPROVED	
<input type="checkbox"/> APPROVED AS NOTED	
<input type="checkbox"/> REVISE AS NOTED AND RESUBMIT	
<input type="checkbox"/> REJECTED/RESUBMIT AS SPECIFIED	
<input type="checkbox"/> FURNISH () CORRECTED COPIES	
<p>Notations do not authorize changes to contract sum.</p> <p>Submittal was reviewed for design conformity and general conformance to contract documents only. The Contractor is responsible for confirming and correlating dimensions at job sites for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of his work with other trades and full compliance with contract documents.</p>	
<p>BY _____</p> <p>DATE _____</p> <p>_____</p> <p>(NAME OF COMPANY)</p>	

APPROVAL FOR DESIGN CONCEPT	
<input type="checkbox"/> APPROVED	Final approval. Fabrication may proceed on work as shown.
<input type="checkbox"/> APPROVED AS NOTED	Fabrication may proceed on the basis of corrections indicated.
<input type="checkbox"/> DISAPPROVED	Fabrication may not proceed. Revisions shall be made and submitted for further check.
Approval is only for conformance with the design concept of the project and compliance with the information given in the contract documents. The contractor is responsible for dimensions to be confirmed and correlated at the job sites, for information that pertains solely to the fabrication processes or to techniques of construction, and for the coordination of the work of all trades.	
BY _____	
DATE _____	
_____ (NAME OF COMPANY)	

SIFC-1402.0 ON-SITE CONCRETE BATCH PLANTS

- 1402.1** **Scope:** The requirements of this section, ASTM C94 and ASTM C685 shall apply whenever a concrete batch plant is erected on-site.
- 1402.2** **Inspections:** Prior to the manufacture of concrete, the *Special Inspections Engineer of Record (SIER)* shall inspect the concrete batch plant site and batch plant and *certify* in writing to **FCCSS**:
- a. The scales are accurate.
 - b. The batch plant is capable of producing concrete in compliance with ACI 318 Section 5.8.3, and the batch plant complies with requirements of ASTM C94 and ASTM C685.
 - c. Access roads are at least twenty feet wide, located such that delivery trucks will not contaminate stock piles. Mud mats are large enough to prevent contamination of stock piles.
 - d. Barricades and warning devices are installed to prevent workers from entering the working radius of the scraper boom. Stock piles are separated by walls having a 45 degree minimum angle from the leading edge of the stock pile, and extending to the outside perimeter of the boom radius.

SIFC-1403.0 FIRE PROTECTION

The requirements of this section shall apply to all commercial buildings under construction.

- 1403.1** **Fire Extinguishers:** The **General Contractor (GC)** shall be responsible for the installation and maintenance of portable fire extinguishers during construction as required by BNBC Section 3305.2.
- 1403.2** **Standpipes:** The **GC** shall be responsible for the installation and maintenance of standpipes during construction as required by BNBC Section 3305.3. Standpipes shall be installed during construction as the work of the building progresses, beginning at 40 feet. The standpipe system shall be carried up with each floor and shall be installed and ready for use as each floor progresses. Standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring. Free access from the street to such standpipes shall be maintained at all times. Materials shall not be stored within 5 feet of any fire hydrant or in the roadway between such hydrant and the center line of the street. Failure to comply with this section shall result in the immediate stop of all work on the project until such time as the standpipes are properly placed.

SIFC-1404.0 OCCUPANCY REQUIREMENTS FOR NEW BUILDINGS AND ALTERATIONS TO EXISTING BUILDINGS

The requirements of this section shall apply for all commercial construction projects of all Use Groups and for residential construction projects of Use Group R-1 and R-2, pursuant to the Fairfax County Zoning Ordinance (Chapter 112 of the Code of the County of Fairfax).

1404.1 Non-Residential Use Permit

- a.** A *Non-Residential Use Permit* (Non-RUP) is required prior to use or occupancy of a commercial building (Residential Use Permits for a residential building).
- b.** A new Non-RUP is required as follows:
 - prior to occupancy of a new building or tenant space; or
 - prior to a change of Use Group of a building or tenant space; or
 - whenever a building or tenant space has either an increase or decrease in gross floor area; or
 - whenever a building or tenant space has a change in proprietorship.
- c.** In other instances of renovations of an existing building, structure or tenant space where such a building, structure or tenant space has a valid certificate of use and occupancy, final inspection approvals serve as the certificate of use and occupancy, and a new Non-RUP is not required.
- d.** A "building" is identified by a unique street address. It is the responsibility of the building owner to file for and obtain a Non-RUP for a building shell prior to any tenant occupancies. It is the responsibility of building tenants to file for and obtain a Non-RUP for individual tenant spaces prior to use or occupancy. For purposes of this chapter, the terms "tenant space," "tenant occupancy," etc., refer to all space and occupancy, whether occupied by a tenant or an owner.

1404.2 Non-RUP Procedural Requirements

1404.2.1 Building Shell Final Inspections

A Non-RUP for a building shell may be obtained after final inspections are performed and approved by the following Fairfax County organizations:

- Electrical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
- Mechanical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
- Plumbing Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
- Elevator Inspections, Mechanical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.

- Fire Protection Systems Testing Section, Fire Prevention Division of the Fire and Rescue Department.
- Department of Health Services (applicable only to food establishments, medical buildings, health spas, etc.).
- For buildings subject to special inspections, **FCCSS** approval, after review and approval by the appropriate **Registered Design Professionals**, of the *Final Report of Special Inspections* submitted by the **Special Inspections Engineer of Record (SIER)**.

Note: The above items may be in any order, but all are required prior to the following:

- Inspections Section, of the Fire Prevention Division of the Fire and Rescue Department. The **Owner** shall request shell occupancy inspection prior to occupancy, for Use Groups A, E, H or I; or within five working days after occupancy, for Use Groups B, F, M, S or U.
- Building Inspections, Critical Structures Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.

Note: The above items are required prior to:

- Public Utilities Inspections Branch of the Division of Design Review, DEM.

After all the above items are satisfied, application may be made for the Non-Residential Use Permit.

- The owner shall request occupancy load posting inspection by **FCCSS** within five working days after occupancy for rooms of assembly or education.

1404.2.2 Minimum Building Shell Requirements for Non-RUP

- a.** Prior to issuance of a building shell Non-RUP, the following building, fire, and life safety features shall be completed:
 - I. Exit stairs;
 - ii. Grade exit lobbies;
 - iii. Grade exit corridors or passageways;
 - iv. Elevator shaft enclosures;
 - v. Required exit lights and emergency lighting;
 - vi. Elevator emergency recall system or elevators must be locked out of service;
 - vii. Required fireproofing of structural members in the core and occupied areas;
 - viii. Firestopping of wiring, piping and other penetrations, both vertical and horizontal, in floors, ceilings and walls;
 - ix. Removal of combustible trash and construction debris;
 - x. Storage areas complying with the Material Storage requirements (Section 1405.2) of this chapter;
 - xi. Firefighting, fire detection, and fire suppression systems complying with the Fire Protection and Safety Requirements for Partially Occupied Buildings (Section 1405.0) of this chapter.

- b. All sprinklers, standpipes, alarms, signaling systems and other required fire suppression or firefighting systems shall be activated throughout the entire structure prior to building shell Non-RUP. Under no conditions shall any fire suppression or firefighting system be shut off in any occupied area, unless the valve or other activation control mechanism is continuously manned, during the period the system(s) is(are) shut off. If this provision is deemed unworkable, any work shall be done after normal business hours. Subject to approval by the Fire Prevention Division and by **FCCSS**, a fire watch shall be instituted during the time any fire suppression or firefighting system is out of service, with the number of persons required for fire watch such that the entire building shall be checked every hour; residential buildings of Use Group R-1 and R-2 and educational buildings of Use Group E shall be checked every half hour. The **General Contractor (GC)** shall submit a written record of fire watch activities to the Fire Prevention Division. The **GC** shall also notify the Fairfax County Emergency Operations Center when any fire suppression or firefighting system is placed out of service.
- c. The unoccupied portion of the building shall comply with the Fire Protection and Safety Requirements for Partially Occupied Buildings (Section SIFC-1405.0).

1404.2.3 Tenant Space Final Inspections

A Non-Residential Use Permit for any tenant in a building may be obtained only after the following conditions have been met:

- a. A Non-Residential Use Permit for a building shell has been issued.
- b. Interior work in this tenant's space, including any modifications to fire protection systems, has been inspected and approved by the appropriate Fairfax County organizations:
 - Electrical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
 - Mechanical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
 - Plumbing Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
 - Elevator Inspections, Mechanical Inspections Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.
 - Fire Protection Systems Testing Section, Fire Prevention Division of the Fire and Rescue Department.
 - Department of Health Services (applicable only to food establishments, medical buildings, health spas, etc.).

Note: The above items may be in any order, but all are required prior to the following:

- Inspections Section, of the Fire Prevention Division of the Fire and Rescue Department. The tenant shall request occupancy inspection prior to

- occupancy, for Use Groups A, E, H or I; or within five working days after occupancy, for Use Groups B, F, M, S or U.
- Building Inspections, Critical Structures Section, Commercial Inspections Branch of the Division of Inspection Services, DEM.

After all the above items are satisfied, application may be made for the Non-Residential Use Permit.

- The tenant shall request occupancy load posting inspection by **FCCSS** within five working days after Non-RUP for rooms of assembly or education.
- The unoccupied portion of the building shall comply with the Fire Protection and Safety Requirements for Partially Occupied Buildings (Section SIFC-1405.0).

SIFC-1405.0 FIRE PROTECTION AND SAFETY REQUIREMENTS FOR PARTIALLY OCCUPIED BUILDINGS

1405.1 General: The existing fire protection, egress paths, and fireresistant construction protection required for occupied areas shall be maintained at all times while ongoing construction in unoccupied areas is in progress.

1405.2 Material Storage:

a. Non-combustible Storage - Area Limitations

Non-combustible materials are those that do not support combustion and are not readily ignitable. Examples of non-combustible materials are: drywall; metal studs, fire retardant lumber; metal doors; solid core wood doors, including packaging aids without voids; sheet metal ducts; masonry; non-combustible insulation; plumbing fixtures; light fixtures wrapped in tight plastic; and other materials of similar characteristics.

Non-combustible storage may be unlimited in area; however, the weight of material stored shall not exceed the structural design capacity of the floor.

b. Combustible Storage - Area Limitations

Combustible materials are those that readily support combustion or are readily ignitable. Examples of combustible materials are: hollow core wood doors; wood studs, paneling and other wood products; carpet and padding; vinyl core trim and base; insulation with combustible vapor facing; non-combustible products wrapped in large quantities of combustible packaging or storage aids, and other materials of similar characteristics.

Combustible storage shall be limited to 2,500 cubic feet or 10 percent of the floor area, whichever is smaller; however, the weight of material stored shall not exceed the

structural design capacity of the floor. The **Owner** shall be responsible for obtaining a Fire Prevention Code Permit for combustible storage exceeding these limitations pursuant to the Virginia Statewide Fire Prevention Code. Combustible storage areas located on an occupied floor shall be separated from the occupied areas by one-hour fire-resistance rated fire partitions.

c. Storage Arrangement:

Storage materials, both combustible and non-combustible, shall be arranged in neat piles with the floor kept broom-clean and free of construction debris. Egress aisles shall be maintained. Storage shall be kept a minimum of two feet below ceilings, sprinkler heads, or the lowest member of the floor-ceiling or roof-ceiling assembly.

1405.3 Fire Suppression System Requirements:

- a.** In fully sprinkler-protected buildings, sprinkler protection shall be operational at all times.
- b.** Sprinkler heads shall be located within 12 inches of the floor or roof deck above, in either the pendant or upright position. If the ceiling grid is in place, the sprinkler shall be installed in the pendant position.
- c.** The use of commercial, rapid or quick response sprinkler heads, located at the future ceiling line without ceiling tiles in place, (except at the sprinkler head location), shall be subject to approval by the Fire Prevention Division.
- d.** Where in the opinion of the **FCCSS** Inspector or the Inspector of the Fire Prevention Division, the type or quantity of combustible storage exceeds the limitations of the existing sprinkler system design, the sprinkler system in these areas shall be modified to conform with the fire hazard posed by the combustible storage.
- e.** In areas used for non-combustible storage or in unfinished tenant areas, the sprinkler heads may be located at the future level of the suspended ceiling.

1405.4 Special Cases: The criteria for fire prevention measures set forth in this document cover the majority of field conditions. It is conceivable that individual situations may arise which shall be evaluated for compliance on a case-by-case basis.

